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More than 125 applicants were refused admission to the health education program at the University of California, Berkeley, in 1971. Yet each was admissible to the graduate division by the most rigorous criteria. These people had made a career decision to enter the field of public health but were denied that choice. What happened to them? Some were probably accepted by other schools of public health. Some continued in their jobs. Later, in all probability, they were denied advancement because they did not possess an MPH degree, and thus their future job mobility was decreased. Some undoubtedly chose other professional careers.

This is just one experience

Alternative to Current MPH Degree Program

in 1 year at one school of public health. If a manpower shortage exists, and indeed this is evident, we must seek other means of providing formal education than requiring 12 to 24 months of in-residence study at a school of public health to qualify for the MPH degree.

The average student enrolled at a school of public health has obtained a bachelor's degree and

often has an advanced professional degree. Thus in all but a few instances he has demonstrated his ability to perform in a professional capacity. Yet he might have to uproot a family, sever ties with his community and professional life, and matriculate at Berkeley, Los Angeles, Loma Linda, or, for a fortunate few, Honolulu, to fulfill the requirements for an additional degree.

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Approximately 15,000 community health professionals are scattered across the 13 Western States. Most of them, under these circumstances, cannot nor ever will enroll in one of the five western schools of public health.

Is There An Alternative?

A professional person cannot continue to be competent in his field without renewing his knowl-

edge and skills constantly through continuing education. A case can be made for an MPH degree that would be good for only, say, 7 years and would have to be re-issued after presentation of evidence that the holder had continued his education during the 7-year interim.

Several schools of public health are experimenting with the "satellite" campus. These campuses

are generally located in a large State or city health department within easy reach of the parent university. They are not, however, appropriate in an area as large as the Western region, with its great and widely scattered number of health workers.

Five schools of public health in the West (University of California at Berkeley and Los Angeles, Loma Linda University, University of Hawaii, and the University of Washington) have formed a consortium to provide continuing education to health professionals in the Western States. Each year the continuing education program presents an average of 40 courses in the field, using a wide variety of formats and teaching modalities. Experience has shown that professionals can and do obtain knowledge and learn new behavior patterns by attending these continuing education courses (1, 2). We also know, through systematic studies, the specific needs that professionals have for their own development (3, 4).

Why not apply what we know about adult learning and continuing education to the graduate degree program? The western schools intend to do just that with financial assistance from the Division of Allied Health Manpower, Bureau of Health Manpower Education, National Institutes of Health. The consortium has just entered into a 12-month contract with the division to test the feasibility of this kind of approach to a graduate degree in public health.

The faculties of the four schools and the staff members of the Program of Continuing Education in Public Health have been working for the past 18 months toward developing an extended MPH degree program with the

objectives of (a) reducing the length of time in residence for the degree and (b) enhancing the "real world" aspect of graduate education through continuing involvement of the students and faculty in field activities. Building on these experiences, they anticipate a design for an MPH degree program in which a person would spend a minimum of one-quarter time on campus. A longer time in residence would be necessary for some specialty programs and for some people, depending on their background and experience. In addition to the concern for the person who cannot return for full-time study, there are organizational and community reasons for such an undertaking.

A significant proportion of all health professionals employed by community health organizations are not graduates of formal post-graduate educational programs in public health. This fact is particularly true of people in decision-making positions. The reasons are many and complex, including, for example, an increasing tendency by physicians to leave the practice of medicine for positions in a variety of health agencies.

One study (3) completed by the staff of the Program of Continuing Education in Public Health showed that in local and State health departments in the 13 Western States, fully 66 percent of professionally employed persons had never been enrolled in a school of public health. Many of the professionals entering the health field were clinically oriented, rather than community or "prevention" oriented, and had little or no background in administration.

The needs for formal educational preparation, as manifested by the MPH degree, are related not only to civil service require-

ments, advancement, salary levels, and so on, but more basically to the knowledge, skills, and content of courses offered in schools of public health. Since health practitioners occupy responsible positions in public health agencies, an upgrading of their abilities to perform in these jobs is essential as well as desirable.

The manpower needs for adequately trained community health workers who can provide not only technical guidance but also administrative leadership are greater today than ever before—especially in the new and critically important areas of medical management (health maintenance organizations), environmental health management, and behavioral science epidemiology.

Graduate education in the traditional setting and the use of traditional methods cannot begin to meet this manpower demand. The number of persons who can be admitted to full-time study is severely limited and, more importantly, a large segment of potential candidates is screened out because these persons cannot, for a variety of valid reasons, matriculate for 1 year or more to a university campus. As a consequence, a tremendous pool of talent, skill, and potential for leadership is lost to public health.

Graduate education is undergoing thorough reappraisal, and new modalities for meeting the changing and increasing demands for graduate education are under discussion and study. The field of health should be in the forefront of exploring different and more effective ways of meeting these challenges.

Some assumptions that limit service to part-time students must be reexamined and restructured. Courses normally are arranged in

time packages of 50 minutes and delivered on a weekly basis over a period of 12 weeks. It might be possible to offer the same number of hours of instruction in an intensive full-time week or a series of weekends.

It is assumed that students in residence gain a much richer education than part-time students because of their total exposure to the university milieu, to intellectual stimulation, to library facilities, and so forth. Academic study related closely to the job experience and the use of loan library facilities, however, could provide an equally rich, although different, type of intellectual stimulation.

It is also assumed that the most dependable learning experience occurs when a professor is in direct contact with a student group in a university classroom. The possibility exists that effective learning might also occur in "learning cells" of students, meeting without an instructor to master concepts or problems; also through books, television, audiotapes, records, slides, and films.

Another point frequently made is that courses and curriculums adapted to the needs of part-time adult students will lower the educational quality of instruction. On the other hand, it is possible that concern for relevance and the accompanying motivation might improve the level of instruction.

What Has Been Accomplished?

The Program of Continuing Education in Public Health is guided by an interlocking network of faculty and practitioner committees. Policy direction is provided by an executive committee consisting of five deans and key faculty. This committee, some months ago, approved the program staff's suggestion to be-

gin exploring the restructuring of the MPH degree program. The staff held a subsequent meeting with the deans to explore further the implications, problems, and goals of such an undertaking.

Staff members also met with the curriculum committees of each school to discuss the proposal further. In each instance the curriculum committees approved the proposal in principle, with the provision that the external program degree should in no way be diminished either by the teaching of courses (that is, courses, although restructured, would be taught by faculty of the sponsoring schools rather than an external degree faculty), or by lower entrance requirements for students enrolled in such a program.

Furthermore, the staff was directed to meet with each school's operating division to determine—

1. Interest in participating in granting degrees in an external program

2. Interest in developing service courses, which they will teach in an external degree program

3. Which courses currently being taught could be restructured for presentation off campus.

In addition, the staff is meeting with individual faculty members to determine their interest in participating in teaching in the extended degree program.

Meetings have been completed with all faculty groups in the University of California at Berkeley, University of Hawaii, and Loma Linda University. Meetings have been completed with the division chairmen at the University of California in Los Angeles and at the University of Washington.

All universities have selected their division representatives in

the specialty areas of health education and behavioral science, environmental health science, epidemiology and biostatistics, and health service administration. The initial meeting of these faculty groups has been held. Followup meetings were scheduled for early fall with interim individual faculty to work on designs for the off-campus courses.

Several preliminary models for the extended degree have been proposed by faculty. Although faculty support for such an undertaking is not uniform, there is widespread support for such an undertaking and nearly unanimous approval of the feasibility study.

The graduate division of the University of California at Berkeley, the University of Hawaii, and Loma Linda University, after discussions with staff members, has approved the proposal again in principle. The President's Task Force on the Extended University (5, 6), consisting of faculty members from all nine campuses of the University of California, recommended that "the University of California should offer programs of part-time study leading to graduate degrees at the master's level." The report further recommended that new curriculums should be designed that would meet the specific needs of part-time students and contribute to the public interest. Substantial use of a variety of new instructional technologies and independent study also was urged by the task force. The University of Hawaii, too, is pursuing the open or extended university concept (7).

Preliminary Market Research

Staff members of the Program of Continuing Education in Public Health have discussed the

proposal with its network of State continuing education committees. There is uniform agreement that such a program will attract significant numbers of students in each of the 13 Western States. Agreement is unanimous that this program will meet a genuine need in the field.

To obtain a better grasp of the potential market, the program staff conducted further inquiries in two States. In Washington State, each local health officer was queried regarding his staff's interest in participating in such a program. Fourteen of the 19 health officers indicated genuine interest, with only one negative response and four qualified positive responses. In Montana 150 health professionals were queried as to their interest, and 71 indicated a desire to participate.

Feasibility Study Objectives

The study has three distinct task areas: (a) to work with faculty groups in testing the feasibility of the extended degree, (b) to work with university administration officials to gain approval for such an undertaking, and (c) to complete surveys to determine the market for such a program.

More specific objectives follow, along with how we propose to meet these objectives.

1. To adapt current curriculums leading to an MPH degree in certain specialties (for example, health education, administration, and environmental health) from a consecutive in-residence program of 1 or 2 years to a program of up to 5 years of work and study. The majority of required units would be completed off campus, with a minimum of one-quarter of study to be completed on campus during regular sessions.

2. To determine which of the currently available courses can be restructured for off-campus presentation and to redesign them accordingly by using a variety of potential modalities including videotape, audiotape, or both, correspondence, programed instruction, intensive seminars, and weekly, biweekly, or weekend classes taught onsite.

3. To explore, with the specialty faculties from each of the sponsoring schools, mechanisms for the joint development and teaching of courses in their specialty areas.

These objectives will be met by convening work conferences of representatives from the various specialty departments of the four schools to reach agreement on proposed curriculums and to make definite faculty assignments for teaching responsibility for individual courses. Staff members will then work individually with faculty members to redesign the courses to be taught in the field.

Courses that lend themselves to teaching by videotapes and audiotapes, programed instruction, and so forth will be produced with the help of university personnel outside the school who have special technical skills; for example, the University of California's television office.

4. To develop curriculums leading to an MPH degree in new emerging areas of specialization; for example, medical management, administrative environmental health, and behavioral sciences epidemiology.

5. To design courses for these new specialties, specifically to be taught off campus.

A committee has been proposed to represent faculty members from the programs of administration, medical care, environmental health, and behavioral

sciences and epidemiology, as well as selected members from the continuing education program's field faculty who are not members of the faculty of the schools of public health but who hold faculty positions in other schools and colleges. This committee will develop new curriculums and identify which courses can be offered off campus in the extended program and which courses should be taken on campus.

6. To test with each university the feasibility of reciprocally accepted credit granted by the participating schools. If this is not feasible, to develop a method of joint appointments at all schools of participating faculty.

This objective can be met if every faculty member from the participating schools who accepts teaching assignments for the extended program is appointed as a visiting faculty member at each of the participating schools. With actual experience in teaching the courses, a proposal will be submitted to the schools for amending current regulations on the number of credits to be accepted toward a master's degree by the participating schools.

7. To determine a student-to-faculty ratio for the extended program and to make recommendations as to the number of additional faculty positions and academic levels required to carry out the program.

After the curriculums and individual courses have been designed for in-the-field presentation and after agreement has been reached among the participating schools on the minimum amount of time to spend on campus, a specially convened subcommittee of representatives from the four curriculum committees of the sponsoring schools will review all

proposals for courses and recommend the optimum faculty-to-student ratio for the extended program, as well as the number of students who can be admitted in any 1 year. Because a student will require 3 to 5 years to complete the extended program, the longitudinal quota system will be designed to integrate part-time students with on-campus students and continuing students.

8. To identify and recruit a cadre of field preceptors and faculty and to begin procedures for their appointment to appropriate faculty positions at the universities.

This objective will be met by staff and faculty in each of the specialties, drawing up a potential panel of people who could serve as field preceptors and faculty. Curriculum vitae will be submitted to each of the sponsoring universities for approval as lecturers.

9. To determine the potential pool of students in specific specialty areas and which of these potential applicants qualify for admission to the sponsoring schools.

10. To determine the number of students who would be willing to assume all or a percentage of their tuition costs while enrolled in the extended MPH program.

A survey of people and agencies interested in the program will be made in the Western States. Data will also be obtained on the willingness of persons and agencies to pay tuition costs. Curriculum vitae and transcripts will be obtained from these persons and submitted to the graduate divisions of the four schools to determine which ones are acceptable for graduate admission.

11. To seek approval from the appropriate bodies (faculty senate, graduate division, and so

forth) at each university for courses of study in the extended program.

This objective will be accomplished by preparing a formal proposal for the graduate division of each school. Once this proposal has been submitted, a member of the academic senate and graduate council of each school will be present to defend the proposal.

12. To establish cost figures for the extended program, based on tuition by unit or some other mechanism.

A staff member of the Program of Continuing Education in Public Health will be assigned to each participating school to work directly with the business offices of the university and the school to establish tuition figures per unit or semester. These figures will be based on the potential pool of students, course design, and locations or suggested locations where courses can be taught in the field.

13. To determine the policies of civil service commissions and administrative bodies of nongovernmental agencies concerning educational leave, tuition refund, and so forth.

The staff of the Program of Continuing Education in Public Health, working through existing State continuing education committees, will collect and analyze governmental and nongovernmental agency policies on educational leave and tuition refund. Once this information has been collected and collated, the continuing education staff will, if necessary, hold conferences with selected administrative bodies to clarify ambiguities where they exist and to gain additional information as indicated.

14. To determine the availability of textbooks, journals, and

other works at universities and colleges in each of the 13 Western States and to integrate the emerging microfiche library at the Health Services Research Center, Kaiser Foundation Hospitals, Portland, Oreg., into the lending library of the program.

Faculty from the sponsoring schools will provide the staff of the Continuing Education in Public Health with reading lists for presently available courses. A random sample of texts and readings for these courses will be selected. Staff will then survey selected libraries at universities, colleges, hospitals, and health departments to determine the availability of required textbooks, journals, and other works at these facilities. Furthermore, the staff of the Program of Continuing Education in Public Health will hold conferences with staff members of the microfiche library in Portland to determine how this existing facility may be integrated into the program.

Preparation of the final study report will include a proposal for an extended curriculum, if found feasible. A grant application for long-term support would be expected.

The feasibility study has just been started. There is a myriad of tasks to be performed—at a time when the schools of public health are under severe financial strain and the faculties are understaffed. The schools are in a unique position to provide leadership, however, and to demonstrate possible alternative modalities for graduate education, with a real potential for adaptation by other professional schools.

The western schools of public health, by forming a consortium that draws upon the resources, finances, and faculty of all the schools, have pioneered a unique

approach to providing continuing education on a regional basis. No one school could mount an extended degree program of this magnitude. Each school has faculty strengths the other schools do not possess. If these strengths can be further capitalized, faculty as well as students will benefit and perhaps, most importantly, the communities served by the public health workers.

REFERENCES

- (1) Miles, R. E., and Porter, L. W.: Leadership training: Back to the classroom? *Personnel Magazine*, American Management Association, Inc., New York, July–August 1966.
- (2) Parlette, N., Hutton, G., and Rosen, M.: Evaluative study of two versions of a seminar on mind-affecting drugs. *Program of Continuing Education in Public Health*. HSMHA Health Rep 86: 933–936, October 1971.
- (3) Callan, L. B., Parlette, N., and Leonard, A. R.: 12-State survey of needs and interests in continuing education in public health. *Public Health Rep* 84: 741–755, August 1969.
- (4) Carlaw, R. W., Hellman, S., and Parlette, N.: The organization and continuing education: Program of Continuing Education in Public Health. American Public Health Association, Western Regional Office, San Francisco, May 1969.
- (5) University of California: Degree programs for the part-time student: A proposal. Report of the President's Task Force on the Extended University, Los Angeles, November 1971.
- (6) University of California: Problems and opportunities of the extended university: Proceedings of the University of California 25th All-University Faculty Conference, Davis, Calif., Mar. 25–27, 1970.
- (7) Cleveland, H.: An open program for the University of Hawaii: University of Hawaii, Honolulu, September 1971.